

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE  
(REV. 7-2005)

ATTORNEY'S DOCKET NUMBER

0-010424USSZ2FN

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

**10/586197**

INTERNATIONAL APPLICATION NO.  
PCT/US2005/001168

INTERNATIONAL FILING DATE  
14/01/2005

PRIORITY DATE CLAIMED  
16/01/2004

TITLE OF INVENTION  
BINDER COMPOSITIONS

APPLICANT(S) FOR DO/EO/US

David F. Diehl, Theodore Del Donno, Carla B. Dittman McBain, David M. Lee, Robert Holmes, and William R. Sands

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☒ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☒ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. **EV243787191US**

| U.S. APPLICATION NO (if known, see 37 CFR 1.5)<br><div style="font-size: 1.5em; font-weight: bold;">10/586197</div>  | INTERNATIONAL APPLICATION NO.<br><div style="font-weight: bold;">PCT/US2005/001168</div> | ATTORNEY'S DOCKET NUMBER<br><div style="font-weight: bold;">0-010424USSZ2FN</div>   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
|--|--|---|--------------|--|-----------|------------|-----------|---|------------|--------|--------------|--------------|------|--------------|-----------|----|-----------|--------------------|---------|---|-------------|--|---------|--|-------------|--|---------|--|-------------|--|---------|--|-------------|--|---------|--|-------------|--|--|--|--------------|----|--------------|----|
| 23. Other items or information:  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| The following fees have been submitted:<br>24. <input checked="" type="checkbox"/> Basic national fee ..... \$300<br><br>25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c))<br>If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article ..... \$0<br>All other situations. .... \$200<br><br>26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))<br>If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4). . . \$0<br>Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority. .... \$100<br>International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB. .... \$400<br>All other situations. .... \$500<br><br><b>TOTAL OF 24, 25 and 26 =</b>  |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">CALCULATIONS</th> <th style="width: 10%;">PTO USE</th> </tr> </thead> <tbody> <tr> <td>\$ 300.00</td> <td></td> </tr> <tr> <td>\$ 200.00</td> <td></td> </tr> <tr> <td>\$ 400.00</td> <td></td> </tr> <tr> <td>\$ 900.00</td> <td></td> </tr> <tr> <td colspan="2" style="height: 40px;"></td> </tr> <tr> <td>\$ 0.00</td> <td></td> </tr> <tr> <td>\$ 0.00</td> <td></td> </tr> <tr> <td>\$ 0.00</td> <td></td> </tr> <tr> <td>\$ 1,550.00</td> <td></td> </tr> <tr> <td>\$ 0.00</td> <td></td> </tr> <tr> <td>\$ 1,550.00</td> <td></td> </tr> <tr> <td>\$ 0.00</td> <td></td> </tr> <tr> <td>\$ 1,550.00</td> <td></td> </tr> <tr> <td>\$ 0.00</td> <td></td> </tr> <tr> <td>\$ 1,550.00</td> <td></td> </tr> <tr> <td>\$ 0.00</td> <td></td> </tr> <tr> <td>\$ 1,550.00</td> <td></td> </tr> <tr> <td colspan="2" style="height: 20px;"></td> </tr> <tr> <td>Amount to be</td> <td>\$</td> </tr> <tr> <td>Amount to be</td> <td>\$</td> </tr> </tbody> </table> | CALCULATIONS | PTO USE  | \$ 300.00 |            | \$ 200.00 |   | \$ 400.00  |        | \$ 900.00    |              |      |              | \$ 0.00   |    | \$ 0.00   |                    | \$ 0.00 |   | \$ 1,550.00 |  | \$ 0.00 |  | \$ 1,550.00 |  | \$ 0.00 |  | \$ 1,550.00 |  | \$ 0.00 |  | \$ 1,550.00 |  | \$ 0.00 |  | \$ 1,550.00 |  |  |  | Amount to be | \$ | Amount to be | \$ |
| CALCULATIONS   | PTO USE  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 300.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 200.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 400.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 900.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
|  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 0.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 0.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 0.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 1,550.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 0.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 1,550.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 0.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 1,550.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 0.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 1,550.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 0.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| \$ 1,550.00  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
|  |  |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| Amount to be   | \$   |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| Amount to be   | \$   |   |              |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Total Sheets</td> <td style="width: 15%;">Extra Sheets</td> <td style="width: 30%;">Number of each additional 50 or fraction thereof (round up to a whole)</td> <td style="width: 10%;">RATE</td> </tr> <tr> <td>17 - 100 =</td> <td>0 /50 =</td> <td>0</td> <td>x \$250.00</td> </tr> </table> <p>Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">CLAIMS</td> <td style="width: 15%;">NUMBER FILED</td> <td style="width: 15%;">NUMBER EXTRA</td> <td style="width: 10%;">RATE</td> </tr> <tr> <td>Total claims</td> <td>33 - 20 =</td> <td>13</td> <td>x \$50.00</td> </tr> <tr> <td>Independent claims</td> <td>3 - 3 =</td> <td>0</td> <td>x \$200.00</td> </tr> </table> <p>MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00</p> <p style="text-align: right;"><b>TOTAL OF ABOVE CALCULATIONS =</b></p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.</p> <p style="text-align: right;"><b>SUBTOTAL =</b></p> <p>Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).</p> <p style="text-align: right;"><b>TOTAL NATIONAL FEE =</b></p> <p>Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +</p> <p style="text-align: right;"><b>TOTAL FEES ENCLOSED =</b></p> |  | Total Sheets  | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole) | RATE      | 17 - 100 = | 0 /50 =   | 0 | x \$250.00 | CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | Total claims | 33 - 20 = | 13 | x \$50.00 | Independent claims | 3 - 3 = | 0 | x \$200.00  |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| Total Sheets   | Extra Sheets   | Number of each additional 50 or fraction thereof (round up to a whole)  | RATE         |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| 17 - 100 =   | 0 /50 =  | 0   | x \$250.00   |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| CLAIMS   | NUMBER FILED   | NUMBER EXTRA  | RATE         |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| Total claims   | 33 - 20 =  | 13  | x \$50.00    |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |
| Independent claims   | 3 - 3 =  | 0   | x \$200.00   |  |           |            |           |   |            |        |              |              |      |              |           |    |           |                    |         |   |             |  |         |  |             |  |         |  |             |  |         |  |             |  |         |  |             |  |  |  |              |    |              |    |

10/586197

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

- APPROVED FOR PTO 14 JUL 2006
- a. ☐ A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 07-1045 in the amount of \$ \$1,550.00 to cover the above fees.  
A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1045. A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Chief Intellectual Property Counsel  
OMNOVA Solutions, Inc.  
175 Ghent Road  
Fairlawn, Ohio 44333

*Tama Drenski*

SIGNATURE

Tama L. Drenski

NAME

40,139

REGISTRATION NUMBER

July 14, 2006

DATE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of

DAVID F. DIEHL,  
THEODORE DEL DONNO,  
CARLA B. DITTMAN MCBAIN,  
DAVID M. LEE,  
ROBERT HOLMES, and  
WILLIAM R. SANDS

Serial No.

Filed

For BINDER COMPOSITIONS

CERTIFICATE OF MAILING  
VIA EXPRESS MAIL

I hereby certify that the following  
correspondence was deposited with the United  
States Postal Service as Express Mail - Label  
EV243787191US - "Express Mail Post Office to  
Addressee" service in an envelope addressed to:  
Mail Stop PCT, Commissioner for Patents, P.O.  
Box 1450, Alexandria, VA 22313-1450, on July  
14, 2006

  
Kimberly A. Bright, Secy. to Arthur M. Reginelli

TRANSMITTAL SHEET

Enclosed are the following documents:

Transmittal Letter Concerning a Submission Under 35 U.S.C. 371  
Substitute Specification (19 pages)  
Declaration and Power of Attorney (three)  
Assignment Document (three)  
Assignment Recordal Sheet  
Copy of the International Search Report  
Copy of the Written Opinion of the ISA  
Return Receipt Postcard

AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT

The Commissioner is hereby authorized to charge payment of any fees  
associated with this communication or credit any overpayment to Deposit Account No.07-  
1045.

Respectfully submitted,



Arthur M. Reginelli, Reg. No. 40,139  
Tama L. Drenski, Reg. No. 50,323  
Renner, Kenner, Greive, Bobak, Taylor & Weber  
Fourth Floor, First National Tower  
Akron, Ohio 44308  
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July 14, 2006